

BIOGRAPHICAL SKETCH

NAME: Janice A. Dye

POSITION TITLE: Research Biologist

EDUCATION/TRAINING

Institution	Degree	Year	Field of Study
University of MN, St. Paul	D.V.M.	1985	Doctor of Veterinary Medicine
University of Illinois, Urbana	Internship	1985-86	Small animal medicine and surgery
University of Illinois, Urbana	Residency	1986-89	Internal medicine (small animal)
University of Illinois, Urbana	M.S.	1989	Pharmacokinetics/pharmacology/toxicology
N.C. State University, Raleigh	Ph.D.	1998	Comparative Biomedical Sciences

PROFESSIONAL EXPERIENCE:

1995-present Research Biologist, Pulmonary Toxicology Branch, Experimental Toxicology Division, National Health and Environmental Effects Research Laboratory (NHEERL), USEPA, RTP, NC.

1998-present Adjunct Associate Professor, Department of Clinical Sciences (DOCS), College of Veterinary Medicine, N.C. State University, Raleigh, NC.

1992-1994 Postdoctoral Fellow, Center for Environmental Medicine & Lung Biology (CEM & LB), University of N.C., Chapel Hill, NC.

1991-1992 Physical Scientist, Pulmonary Toxicology Branch, USEPA, RTP, NC.

1990-1991 Postdoctoral Fellow, CEM & LB, University of N.C., Chapel Hill, NC.

1989-1990 Postdoctoral Fellow, Pulmonary mechanics research laboratory, Dept. of Veterinary Clinical Medicine, College of Veterinary Medicine, Univ. of Illinois, Champaign-Urbana, Illinois.

1985-1989 Teaching Associate, Department of Veterinary Clinical Medicine, Veterinary Medical Teaching Hospital, University of Illinois, Champaign-Urbana, Illinois

1978-1985 Research Assistant, Dept. of Surgery, College of Medicine, Univ. of MN, Mpls./St. Paul, MN.

PROFESSIONAL SOCIETIES, LICENSES, AND SPECIALTY BOARD CERTIFICATION:

Diplomate, American College of Veterinary Internal Medicine (small animal internal medicine), 1991.

Wisconsin State Veterinary Medical Association, Licensed 1985.

Phi Zeta, National Veterinary Honors Society.

American Veterinary Medical Association

American Society of Investigative Pathology

Comparative Respiratory Society

ACVIM Infectious Disease Study Group

SELECTED AWARDS AND HONORS:

EPA Gold Metal Award (2003) in recognition of outstanding achievements as a member of the National Health and Environmental Effects Research Laboratory in establishing and implementing an integrated research program to define the potential health threat of ambient PM on the American public.

EPA Scientific and Technological Achievement Award (STAA) Level 1 (2002). Co-investigator on an award entitled: Air pollution particles from the Utah Valley cause lung injury and inflammation in humans and animals.

EPA STAA - honorable mention (2000). Primary author of a manuscript awarded for its comprehensive and critical evaluation of the parallelisms between in vivo and in vitro investigations on ozone-induced pulmonary health effects.

Lloyd E. Boley Award (1990) given to the outstanding resident in the College of Veterinary Medicine, University of Illinois, in recognition of excellence in academic performance, research, teaching, and service.

Comparative Respiratory Society Resident Research Abstract Award (1988) given in recognition of significant research in pulmonary medicine by a research trainee.

INVITED LECTURES/SYMPOSIA:

“Vanadium content and related oxidative stress appear to determine airway epithelial cell responses to emission source particulate matter.” Experimental Biology - Symposium on Lung Oxidant Stress & Gene Expression, San Fran., CA -1998.

“Role of metals and related oxidative stress in airway epithelial cell responses to emission source PM.” Experimental Toxicology Division — WIP seminar series, RTP, NC - 1998. “Candidiasis in small animals: A review of predisposing factors.” Infectious Disease Specialist Series - 17th ACVIM Forum, Chicago, IL - 1999. “Increases in Asthma. What’s air pollution got to do with it? Lessons from cats, rats, and cultures.” University of Prince Edward Island, Atlantic Veterinary

College, Charlottetown, P.E.I. - 2000. "Inflammatory airways disease in cats: Similarities to human asthma." Visiting Pulmonary Scholars Program, Duke University, NC - 2001. "A role for metals in PM-associated adverse health effects." National Institute of Public Health and the Environment (RIVM), Bilthoven, The Netherlands - 2001. "US EPA toxicologic studies of PM-associated metals." Oral presentation at a meeting entitled "Understanding the Health Effects of Particulate Air Pollution: Recent Advances and Outstanding Questions" organized by the WHO, HEI and EU, Brussels, Belgium - 2001. "Assessing air pollutant exposure and relevance in small animal veterinary patients." Veterinary Toxicology Curriculum, NCSU, College of Veterinary Medicine, Raleigh, NC - 2001. 74th Western Veterinary Conference (WVC), Respiratory Diseases section, Las Vegas, NV - 2002. Presentations included: "Diagnostics for Feline Bronchopulmonary Disease, Therapy for Feline Bronchopulmonary Disease, Pollutants and Toxins in Small Animal Respiratory Medicine, and Respiratory Disease Case Management." "Genetic influences on *in vitro* particulate matter-induced airway epithelial injury and inflammatory mediator release." 20th VCRS Symposium – Heterogeneity of the Airways, Boston, MA (2002). "Identification and characterization of disease using pulmonary function tests." Internal Medicine Specialist Series - 21st ACVIM Forum, Charlotte, NC (2003).

ASSISTANCE/LEADERSHIP PROVIDED TO SCIENTIFIC COMMUNITY:

EPA-RTP representative to the Visiting Pulmonary Scholars Program (2001 to present).
Participant in an Intergovernmental Personnel Act (IPA) assignment (1998, 1999) between the USEPA and the College of Veterinary Medicine at North Carolina State University, serving as a visiting small animal internist.
Ad Hoc reviewer: Environmental & Health Perspectives, Toxicology in Vitro, Environmental & Nutritional Interactions, Toxicology & Applied Pharmacology, Toxicologic Sciences, Toxicologic Pathology, American Journal of Physiology: Lung Cellular & Molecular Physiology, Journal of Leukocyte Biology, Journal Veterinary Internal Medicine, Advances in Small Animal Medicine & Surgery, Journal of the American Veterinary Medical Association, American Journal of Veterinary Research, Veterinary Medicine, Veterinary Pathology, ACVIM Forum abstracts, EPA STAR & USDA grants.

ASSISTANCE/LEADERSHIP PROVIDED TO THE AGENCY:

Presentations entitled "Pulmonary toxicity of Utah Valley PM: Are empirical indices of adverse health effects coherent with the epidemiology?" at the WHO, HEI and EU sponsored meeting entitled, "Understanding the Health Effects of Particulate Air Pollution: Recent Advances and Outstanding Questions" (Brussels, Belgium – 2001) and at the Scientific Advisory Board (SAB) Executive Council Evaluation of research at EPA, (R.T.P., NC – 2000).
Institutional Animal Care and Use Committee (IACUC) Member and Chair of Training Subcommittee (1995 – 1998).
Member of the Search Committee for hiring an EPA-employed institutional laboratory animal veterinarian (1998 – 2000).

SELECT PUBLICATIONS: (from January 1, 1998 to present, out of a total of 33)

1. Dye JA, Madden MC, Richards JH, Lehmann JR, Devlin RB, Costa DL. Ozone effects on airway responsiveness, lung injury, and inflammation. Comparative rat strain and *in vivo/in vitro* investigations. *Inhalation Tox* 1999; 11:101-26.
2. Costa DL, Gavett SH, Kodavanti UP, Watkinson WP, Dye JA, Dreher KL. Ambient particulate matter and health: what are the animals telling us? In: Mohr, U. Ed., Relationships Between Respiratory Disease and Exposure to Air Pollution. Washington DC: ILSI Press, 1999; 185-194.
3. Dye JA. Candidiasis in small animals: A review of predisposing factors. *Proceedings - 17th ACVIM Forum*, 1999; 633-636.
4. Dye JA, Adler KB, Richards JH, Dreher KL. Role of soluble metals in oil fly ash-induced airway epithelial injury and cytokine gene expression. *Am J Physiol* 277 (Lung Cell Mol Physiol 21) 1999; L498-L510.
5. Jiang N, Dreher KL, Dye JA, Li Y, Richards JH, Martin LD, and Adler KB. Residual oil fly ash induces cytotoxicity and mucin secretion by guinea pig epithelial cells via an oxidant-mediated mechanism. *Toxicol Appl Pharmacol* 2000; 163:221-230.
6. Dye JA, Lehmann JR, McKee JK, Winsett DW, Ledbetter AD, Everitt JI, Ghio AJ, Costa DL. Acute pulmonary toxicity of particulate matter (PM) filters extracts in rats: Coherence with epidemiological studies in Utah Valley residents. *Environ Health Perspect* 2001; 109 (suppl 3):395-403.
7. Pagan I, Costa DL, McKee JK, Richards JR, Dykstra M, Dye JA. Metals mimic airway epithelial injury induced *in vitro* by exposure to Utah Valley ambient particulate matter extracts. *J Toxic Env Health* 2003; Part A, 66:1-26.
8. Pressler B, Vaden S, Lane I, Cowgill L, Dye JA. *Candida* sp. urinary tract infections in 13 dogs and 7 cats: predisposing factors, treatment, and outcome (in press - *J Am Anim Hosp Assoc* 2003).
9. Dye JA and Costa DL. Pulmonary Function Testing and Interpretation in Small Animals. In: King, L ed., *Small Animal Respiratory Diseases*, 1st Edn., Philadelphia: WB Saunders Co., (in press).
10. Dorman DC and Dye JA. Chemical Toxicities. In: Ettinger S and Feldman E eds., *Textbook of Veterinary Internal Medicine*, 6th Edn., Philadelphia: WB Saunders Co. (in press).

11. Dye JA. Identification and characterization of disease using pulmonary function tests. Proceedings - 21st ACVIM Forum 2003, (in press).
12. Williams KJ, Malarkey DE, Cohn LA, Patrick DJ, Dye JA, Toews GB. Spontaneous Feline Idiopathic Pulmonary Fibrosis: Fulfilling the Morphologic Criteria of Human IPF (in submission).
13. Cohn LA, Norris CR, Hawkins EC, Dye JA, Johnson CA, Williams KJ. Clinicopathologic features of idiopathic fibrosis (IPF) in cats (in preparation).